SOUTHERN FOREST PEST REPORTER

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INTERMOUNTAIN STATION
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No.

UNITED STATES
DEPARTMENT OF AGRICULTURE
FOREST SERVICE
STATE AND PRIVATE FORESTRY
SOUTHEASTERN AREA
DIVISION OF FOREST INSECT
AND DISEASE CONTROL

ZONE OFFICES
ASHEVILLE N.C.
MACON GA. ALEXANDRIA LA.

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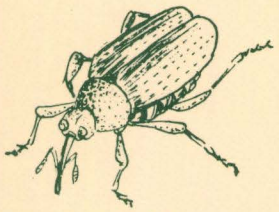

SUMMARY OF CONDITIONS

... Mid to late summer populations of the southern pine beetle are at the highest level of activity recorded thus far this year in most of the outbreak areas throughout the Southeastern Area.

... Several large southern pine beetle spots exceeding 80 trees were detected in the mountains near Andrews, North Carolina. This is the first time since late 1950 that the beetle has posed a threat in this area.

... Ips beetle populations have shown seasonal increases in Alabama, Georgia, Louisiana and North Carolina.

... Evaluation of seed and cone insects in conjunction with cone harvest operations is currently underway throughout the southeast.

... Chestnut blight fungus has been identified as the agent causing extensive cankering on live oaks in Mississippi.

... Oak wilt surveys revealed that levels of incidence remain static in Kentucky, North Carolina, Oklahoma, Tennessee and Virginia.

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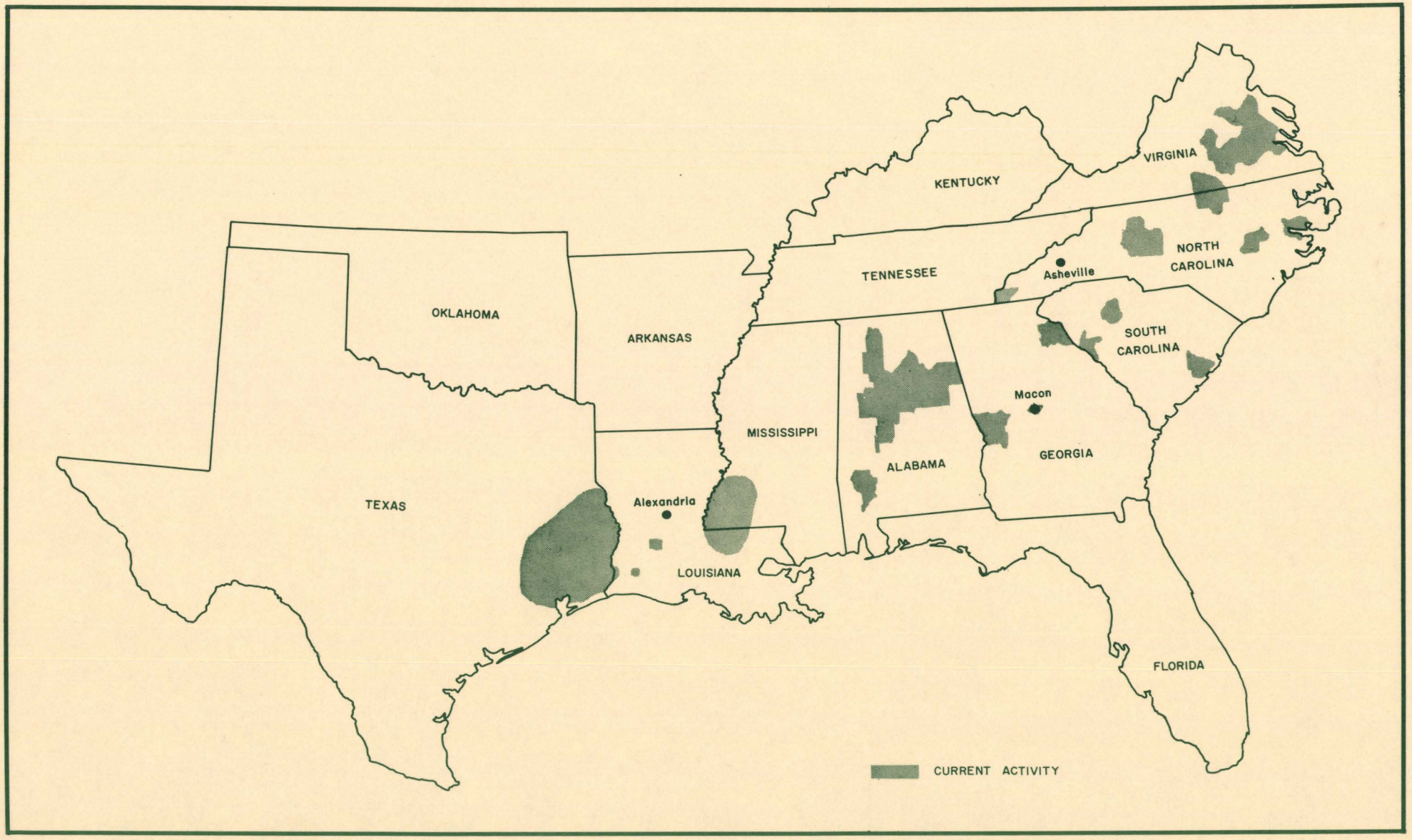

FIGURE 1 SOUTHERN PINE BEETLE ACTIVITY IN SOUTHEASTERN AREA - 1967

STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis Zimm.

ALABAMA A survey of the Bankhead National Forest by the Division of Forest Pest Control in September 1967 indicated that there are an estimated 28.8 trees infested per M acres on the Bankhead Ranger District and 9.4 trees infested per M acres on the Black Warrior Ranger District. Control is being accomplished by salvage and chemical control.

Infestations of southern pine beetle have also increased on the Shoal Creek, Talladega, Oakmulgee and Tuscaloosa Districts of the Talladega National Forest. Chemical control is being used by all Districts.

On private land infestations in Jefferson, Walker, Blount, Shelby, Clarke and St. Clair Counties have increased during the latter part of the summer. Salvage and chemical control is being employed by some landowners.

GEORGIA Scattered small southern pine beetle infestations continue on the Tallulah and Chattooga Districts of the Chattahoochee National Forest.

On the Uncle Remus District of the Oconee National Forest, beetle infestations are on an increase.

An August survey of 33,000 acres in the Piedmont National Wildlife Refuge, by the Division of Forest Pest Control, revealed an estimated 4.5 trees per M acres infested by the southern pine beetle. Chemical control is being initiated by the Department of Interior.

Infestations on private land in Franklin, Hart, Madison, Elbert, Clarke, Bibb, Talbot, Marion, Muscogee and Chattahoochee Counties have increased considerably late this summer (Georgia Forestry Commission).

LOUISIANA The southern pine beetle is in epidemic status over some 670,000 acres of state and private lands in St. Helena, Livingston, East Feliciana, and West Feliciana Parishes in southeastern Louisiana. The level of infestation was estimated at 8.03 trees per M acres susceptible host type during July.

Southern pine beetle infestations have remained relatively static in an epidemic area comprising some 96,000 acres in Allen Parish. The level of infestation was estimated at 2.50 infested trees per M acres host type and the area of infestation appears to be spreading to the south and east.

Infestations in Calcasieu Parish in southwestern Louisiana have increased from 1.82 infested trees per M acres in March to 5.85 infested trees per M acres host type in August. All southern pine beetle activity detected in August was located southwest of Sulphur.

Chemical control and salvage operations are continuing in all outbreak areas in Louisiana.

MISSISSIPPI

Southern pine beetle populations on the Homochitto National Forest declined from 6.29 infested trees per M acres in April to 0.58 infested trees per M acres host type in mid-June. Chemical control and salvage operations are continuing on the Forest.

Infestations on private lands in Amite and Wilkinson Counties in southwest Mississippi have declined to a level of 4.69 infested trees per M acres host type. Current activity is confined to areas southwest of Liberty, and northeast of Woodville.

NORTH CAROLINA

Scattered southern pine beetle activity has been noted as increasing throughout the Piedmont area of the state. Infestations have been detected in Wayne and Greene counties for the first time. Control measures have been intensified to combat the increased activity. (North Carolina Division of Forestry).

An evaluation of scattered infestations on the Tusquitee District of the Nantahala National Forest is currently in progress. To date, a half dozen spots on private and federal lands, ranging in size from 5 to 90 trees have been detected. This activity represents a renewed potential by the southern pine beetle in the mountains after a relatively quiet period lasting from 1959 until now.

SOUTH CAROLINA

An explosive outbreak of the southern pine beetle is in progress on the Tyger and Enoree Districts of Sumter National Forest. The estimated level of infestation in September was 132.1 infested trees per M acres of host type on the Tyger District and 81.6 on the Enoree District. Chemical control operations have been initiated.

An outbreak of southern pine beetle has developed on the Long Cane District of the Sumter National Forest. Activity has increased from a very low level in August 1966 to a present level of 3.8 infested trees per M acres. Moderately high brood densities and ratios of increase indicate a potential for greater damage.

A survey of beetle infestations on the Andrew Pickens District of Sumter National Forest in August showed a seasonal increase in beetle activity. Approximately 1.7 infested trees per M acres was detected. Brood densities and ratios of increase were moderate.

A southern pine beetle outbreak is continuing on the Francis Marion National Forest. Activity is scattered over the entire forest but is greatest on the Witherbee Ranger District. Surveys revealed an average of 17.4 infested trees per M acres of host type in July and 23.3 in September. Salvage and chemical control operations are in progress.

TEXAS

Southern pine beetle populations declined to a level of 2.4 infested trees per M acres on the Big Thicket District of the Sam Houston National Forest. Populations have increased to a level of 1.5 infested trees per M acres on the Angelina National Forest, and 2.7 infested trees per M acres on the Yellowpine District of the Sabine National Forest. Chemical control operations are continuing on all districts having active infestations.

The southern pine beetle continues to cause losses over some 4.5 million acres of private lands in east Texas. Some 3,274 spots were detected as of September 20, and 87,896 trees were treated. The majority of the spots recently detected have been located in the northern part of the infestation areas. (Texas Forest Service).

SOUTHERN PINE BEETLE (Cont'd)

VIRGINIA — Southern pine beetle activity is at a moderate level of activity in the Piedmont area of the state. (Virginia Division of Forestry).

An outbreak of the southern pine beetle was detected on the Richmond National Battlefield Park. Activity had reached a level of 73.4 infested trees per M acres. Brood densities and ratios of increase indicated a potential for greatly increased damage.

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliver)

ALABAMA
FLORIDA
GEORGIA — Black turpentine beetle infestations in Alabama and Florida continue to be limited to areas of disturbance, logging operations, road construction, turpentine operations, and shade trees in private yards.

LOUISIANA — A recently completed evaluation of black turpentine beetle infestations in the Kisatchie National Forest indicate that current losses are at a low level. Very few successful attacks are occuring on standing trees.

MISSISSIPPI — Infestations appear to be at a relatively low level on the Homochitto National Forest. Attacks are confined to stumps and trees infured during the course of logging operations.

NORTH CAROLINA — An August survey for bark beetles revealed the black turpentine beetle as the primary agent in several locations on the Uwharrie District National Forests in North Carolina. Level of infestation is approximately the same as in 1966.

Other infestations noted from throughout the state were found to be associated with ips and southern pine beetle. (North Carolina Division of Forestry).

IPS ENGRAVER BEETLES, Ips spp.

ALABAMA
GEORGIA — Ips infestations have shown a seasonal increase in local areas not receiving sufficient rainfall. They have also been found associated with the current southern pine beetle outbreaks.

IPS ENGRAVER BEETLES (Cont'd)

KENTUCKY — Several group kills resulting from infestation by Ips avulsus Eichh. and I. grandicollis Eichh. were detected in an area severely storm damaged on the Stearns and Williamsburg Districts of the Daniel Boone National Forest. The relatively low level of ips infestation in residual trees is believed due to an intensive salvage program initiated by forest personnel to remove storm damaged material which would have served as breeding sites for the beetles.

LOUISIANA — Increased activity by Ips avulsus was detected on the Kisatchie National Forest during September.

NORTH CAROLINA — Aerial and ground surveys on the Uwharrie District, National Forests in North Carolina revealed epidemic populations of Ips avulsus and I. calligraphus Germ. A contributing factor to the epidemic is drought conditions. A 9.8 inch rainfall deficit was recorded in the area for the year through July. Approximately 5 trees per M acres are infested.

Considerable increase in ips beetle activity is noted in the Piedmont region. The predominant species continues to be Ips avulsus. (North Carolina Division of Forestry).

SOUTH CAROLINA — Ips engraver beetle continues to be associated with southern pine beetle infestations.

SEED AND CONE INSECTS

ALABAMA FLORIDA GEORGIA — Seed and cone insects continue to be of primary concern to timberland managers in the three-state area. They currently are being evaluated by the Division of Forest Pest Control on a longleaf pine seed production area on the Leon Ranger District of the Apalachicola National Forest in Florida to determine the insect species present.

LOUISIANA TEXAS — An evaluation of scion-damaging insects on superior trees was made during the spring of 1967 at the Stuart Seed Orchard, Kisatchie National Forest, by the Division of Forest Pest Control. The insects found causing the most severe damage were Dioryctria sp., and gall weevils, Podapion sp. Other insects found damaging scions were midges, thrips, and a scolytid; Pityopthorus pulicarius (Zimm.)

SEED AND CONE INSECTS (Cont'd)

NORTH CAROLINA — Damage to the cones in a shortleaf seed production area by Dioryctria sp. coneworms continues at a moderate level on the Tusquitee District of the Nantahala National Forest. A thus far unidentified Dioryctria species has been reared in the laboratory from a shortleaf cone.

SOUTH CAROLINA — Two loblolly seed production areas on the Edgefield District of the Sumter National Forest show about the same level of Dioryctria sp., coneworm activity as last year.

MISCELLANEOUS INSECTS

ALABAMA — The large elm leaf beetle, Monocesta coryli (Say), has defoliated numerous elms throughout the Piedmont area of Alabama.

Defoliation by the fall webworm, Hyphantria cunea (Drury) and the unsightly nests made by these insects are apparent throughout the state.

Infestations of the mimosa webworm, Homadaula albizziae Clarke have been reported throughout the state.

ARKANSAS — Defoliation of hardwoods by walkingsticks, Diapheromera femorata (Say), was reported on Dutch Mountain, west of Danville, Arkansas. (ARKANSAS FOREST PEST REPORTER) No walkingstick infestations have been reported from the Ozark or the Ouachita National Forests.

VIRGINIA — Severe damage by the locust leaf miner Xenochalpus dorsalis (Thunb.) noted in Botetourt and Roanoke counties. (Virginia Division of Forestry).

STATUS OF FOREST DISEASES

ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cooke

ALABAMA FLORIDA GEORGIA — Fomes annosus root rot continues to be a management problem in localized areas as new plantations are established and thinnings are made in older plantations. New areas of infection are being realized throughout the three-state area, including the Shoal Creek Ranger District of the Talladega National Forest, Alabama.

BROWN SPOT NEEDLE BLIGHT, Scirrhia acicola (Dearns.) Siggers

ALABAMA
FLORIDA
GEORGIA

Brown spot of longleaf pine is the major disease of thie pine species throughout the three-state area. Control burns are being carried out where competent personnel are available to carry out the practice.

OAK WILT, Ceratocystis fagacearum (Bretz.) Hunt

KENTUCKY

A Trend survey showed no significant increase or decrease in disease intensity between 1966 and 1967. Oak wilt incidence remains low throughout the state.

OKLAHOMA

A survey of 15 northeastern Oklahoma counties conducted during June 1967, failed to reveal any new areas of oak wilt infection. To date, 14 eastern Oklahoma counties are known to have oak wilt.

TENNESSEE

A trend survey established in 1967 in eastern and central Tennessee was extended to include Cumberland County. Survey results revealed a low incidence of the disease throughout the infected area.

VIRGINIA
NORTH
CAROLINA

Survey results revealed that the disease incidence remains low at approximately the same level as in recent years in the infected western counties of these two states. In Virginia, the 1967 survey results revealed 66 infected trees on state and private land along with 59 infected trees on the George Washington National Forest.

COMANDRA BLISTER RUST, Cronartium comandrae (Peck.)

ARKANSAS

Infections of C. comandrae are known to occur over a 10 square mile area on the Buffalo District of the Ozark National Forest. Mortality of shortleaf pine, Pinus echinata, may range as high as 40 percent.

SOUTHERN FUSIFORM RUST, Cronartium fusiforme (A&K) Hedge & Hunt

ALABAMA
FLORIDA
GEORGIA

Southern fusiform rust continues to be the major disease in slash and loblolly pine plantations and to a lesser extent in longleaf pine stands.

Incidence of fusiform rust infected seedlings ranges up to 30 percent in Georgia nurseries.

MISCELLANEOUS DISEASES

ALABAMA

Elm phloem necrosis is causing considerable damage to elm trees in Dallas and Montgomery Counties.

GEORGIA

Several black walnut seedlings infected with "walnut yellows" (cause unknown) have been detected in Georgia nurseries. This disorder causes a yellowing and stunting of the leaves.

MISSISSIPPI

Chestnut blight, Endothia parasitica (Murr.) A.&A., has been identified as the fungus causing extensive cankering on live oak, Quercus virginiana, in Collins, Mississippi.

NORTH CAROLINA

Needlecast is a problem again this year within the Fraser fir Christmas tree sale units on Roan Mountain. Survey results revealed the disease in all the Fiscal Year 1968 sale units. Damage was severe enough in several units to substantially reduce the value of the firs for Christmas tree purposes.

Dutch elm disease is reported killing American elms in cities of Asheboro, Lexington, and in Guilford County. (North Carolina Division of Forestry)

OKLAHOMA

Mimosa wilt, Fusarium oxysporum (Hepting) Toole, was cultured from mimosa located in Oklahoma City, Oklahoma. This is the first known occurance of mimosa wilt in Oklahoma.

TENNESSEE

Severe shortleaf pine mortality has been reported in Fentress County. Aerial and ground surveys revealed locally severe damage in the vicinity of Jamestown, Tenn. Several shortleaf pine stands have been recently clearcut as a result of 50+ % mortality.

TENNESSEE (Cont'd)

The littleleaf disease complex is suspected as the cause of this problem. Although the fungus Phytophthora cinnamomi was not isolated from several soil samples collected from affected stands, the symptoms observed on the affected trees were very similar to the symptoms associated with littleleaf.

Sycamore anthracnose disease of American sycamore has been observed throughout the Zone 1 area this spring and summer. Numerous field reports and observations indicate the disease severity to be higher than normal. Also, the disease has persisted throughout the unusually cool and wet summer of 1967. Normally, the disease subsides with the advent of the drier and warmer summer months.

More detailed information can be obtained by writing to the Forest Pest Control Division Zone Offices listed below or to the Atlanta Office:

ZONES	FOR STATES OF:
Zone 1 Amel E. Landgraf Zone Supervisor Post Office Box 5895 Asheville, North Carolina 28803 Phone: (704) 254-0961, Ext. 625	Kentucky North Carolina South Carolina Tennessee Virginia
Zone 2 William H. Padgett Zone Supervisor Post Office Box 1077 Macon, Georgia 31202 Phone: (912) 746-3533	Alabama Florida Georgia
Zone 3 William M. Ciesla Zone Supervisor 2500 Shreveport Highway Pineville, Louisiana 71360 Phone: (318) 445-6511, Ext. 311	Arkansas Louisiana Mississippi Oklahoma Texas